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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/941,459

App ht(s

Morikawa, Takeshi

Examiner

Joseph Pokrzywa

Group Art Unit 2722



Responsive to communication(s) filed on <u>Dec 20, 1999</u>	·
☐ This action is FINAL .	
☐ Since this application is in condition for allowance except for form in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D.	
A shortened statutory period for response to this action is set to exp is longer, from the mailing date of this communication. Failure to resapplication to become abandoned. (35 U.S.C. § 133). Extensions of 37 CFR 1.136(a).	spond within the period for response will cause the
Disposition of Claims	
	is/are pending in the application.
Of the above, claim(s)	is/are withdrawn from consideration.
Claim(s)	is/are allowed.
	is/are rejected.
	is/are objected to.
☐ Claims	are subject to restriction or election requirement.
Application Papers See the attached Notice of Draftsperson's Patent Drawing Rev The drawing(s) filed on	by the Examiner. is approved disapproved. r 35 U.S.C. § 119(a)-(d). priority documents have been national Bureau (PCT Rule 17.2(a)).
Attachment(s) Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Paper No(s). Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO-948 Notice of Informal Patent Application, PTO-152	
SEE OFFICE ACTION ON THE FO	OLLOWING PAGES

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DETAILED ACTION

Continued Prosecution Application

1. The request filed on 12/20/99 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 08/941,459 is acceptable and a CPA has been established. An action on the CPA follows.

Response to Amendment

2. Applicant's amendment received on 11/23/99, and has been entered and made of record.

Currently, claims 4 through 6, 13 through 16, and 23 through 30 are pending.

Response to Arguments

3. Applicant's arguments with respect to claims 4 through 6, 13 through 16, and 23 through 30 have been considered but are moot in view of the new ground(s) of rejection.

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Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 5. Claims 4, 5, 13, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Oshita (U.S. Patent Number 5,343,306).

Regarding *claim 4*, Oshita discloses an image processing device (facsimile machine, column 1, lines 46 through 53) operable in a plurality of modes of operation (transmitting or receiving modes), comprising a memory (page memory 102) for storing image data of a plurality of frames (column 3, lines 16 and 17, wherein a plurality of frames or pages of documents are stored in the page memory, see column 8, lines 3 through 17), a controller (line counter 107, column 3, lines 48 through 51) for determining a state of the image data for each frame (column 5, lines 26 through 33), an operation panel (manual input section 108) for selecting any of the plurality of modes of operation (column 4, lines 1 through 6), and a controller (controller 10, column 2, lines 32 through 40) for comparing the state of at least two frames, as determined by the state decision controller (column 5, lines 26 through 41, wherein the length of at least two

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sheets are compared to the currently loaded cut sheet length), and for automatically prohibiting selecting an inoperable mode (column 5, lines 42 through 49) of operation of the plurality of modes of operation through the operation panel based on the result of the comparison (column 5, line 64 through column 6, line 35, column 6, line 64 through column 7, line 20).

Regarding *claim 5*, Oshita discloses the image processing device discussed in claim 4, and further teaches of the decision controller determines a length of a frame of the image data in a predetermined direction (column 3, lines 48 through 51).

Regarding *claim 13*, Oshita discloses an image forming apparatus (facsimile machine, column 1, lines 46 through 53) operable in a plurality of print modes (letter size mode and legal size mode), comprising a memory (page memory 102) for storing image data of a plurality of frames (column 3, lines 16 and 17, wherein a plurality of frames or pages of documents are stored in the page memory, see column 8, lines 3 through 17), a printer (printer 110) for reading the image data stored in the memory for each frame and for printing (column 3, lines 52 through 68), a controller (line counter 107, column 3, lines 48 through 51) for determining a state of the image data stored in the memory (column 5, lines 26 through 33), an operation panel (manual input section 108) for selecting any of the plurality of print modes (column 4, lines 1 through 6, and column 6, lines 24 through 40, wherein the START key is pressed after changing paper), and a controller (controller 10, column 2, lines 32 through 40) for comparing the state of at least two frames, as determined by the state decision controller (column 5, lines 26 through 41, wherein the length of at least two sheets are compared to the currently loaded cut sheet length), and for

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automatically prohibiting selecting an inoperable print mode (column 5, lines 42 through 49) of the plurality of print modes through the operation panel based on the result of the comparison (column 5, line 64 through column 6, line 35, column 6, line 64 through column 7, line 20).

Regarding *claim 28*. Oshita discloses an image processing device (facsimile machine, column 1, lines 46 through 53) operable in a plurality of modes of operation (transmitting or receiving modes), comprising a memory (page memory 102) for storing image data of a plurality of frames (column 3, lines 16 and 17, wherein a plurality of frames or pages of documents are stored in the page memory, see column 8, lines 3 through 17), a controller (line counter 107, column 3, lines 48 through 51) for determining a state of the image data for each frame (column 5, lines 26 through 33), a controller (controller 10, column 2, lines 32 through 40) for comparing the state of at least two frames, as determined by the state decision controller (column 5, lines 26 through 41, wherein the length of at least two sheets are compared to the currently loaded cut sheet length), and for automatically prohibiting selecting an inoperable mode (column 5, lines 42 through 49) of operation of the plurality of modes of operation through the operation panel based on the result of the comparison (column 5, line 64 through column 6, line 35, column 6, line 64 through column 7, line 20), and an operation panel (manual input section 108), responsive to the selection prohibiting controller, for selecting any of the plurality of modes of operation, with the operation panel automatically prohibiting selecting the thus determined inoperable mode of operation (column 4, lines 1 through 14, and column 6, lines 7 through 45).

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6. Claims 4 through 6, 13, and 27 through 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshida *et al.* (U.S. Patent Number 5,930,006).

Regarding claim 4, Yoshida discloses an image processing device operable in a plurality of modes of operation ("Nin1" operations, such as 2in1 or 4in1, etc., shown in Fig. 24), comprising a memory (multiport image memory 304 within memory 30, see Fig. 5) for storing image data of a plurality of frames (column 6, lines 47 through 51, wherein two frames or pages are stored, and column 7, lines 25 through 28), a controller (CPU 3, column 5, lines 27 through 32) for determining a state of the image data for each frame (column 6, lines 58 through column 7, line 2, and see Fig. 23, column 15, lines 37 through 46), an operation panel (shown in Fig. 7) for selecting any of the plurality of modes of operation (column 8, line 62 through column 9, line 20), and a controller (CPU3, column 5, lines 27 through 32) for comparing the state of at least two frames (column 14, lines 19 through 46, and particularly column 16, lines 17 through 55, wherein the character size of one document is compared to predetermined pixels, and then repeated for a second document, thus comparing at least two frames), as determined by the state decision controller (steps \$106 in Fig. 21, Fig. 24, and steps \$609, \$613, \$615 in Fig. 26), and for automatically prohibiting selecting an inoperable mode of operation of the plurality of modes of operation through the operation panel based on the result of the comparison (column 14, lines 6 through 18, and steps S616 and S617 in Fig. 26, column 19, lines 14 through 21).

Regarding claim 5, Yoshida discloses the image processing device discussed in claim 4, and further teaches of the decision controller determines a length of a frame of the image data in a

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predetermined direction (column 10, lines 3 through 7, and Fig. 14, which shows the page length in the main scanning direction, and the length in the sub-scanning direction).

Regarding claim 6, Yoshida discloses the image processing device discussed in claim 4, and further teaches of the decision controller determines a frame size of the image data (column 10, lines 3 through 7, and Fig. 14, which shows the page length in the main scanning direction, and the length in the sub-scanning direction).

Regarding *claim 13*, Yoshida discloses an image forming apparatus operable in a plurality of print modes ("Nin1" operations, such as 2in1 or 4in1, etc., shown in Fig. 24), comprising a memory (multiport image memory 304 within memory 30, see Fig. 5) for storing image data of a plurality of frames (column 6, lines 47 through 51, wherein two frames or pages are stored, and column 7, lines 25 through 28), a printer for reading the image data stored in the memory for each frame and for printing (print processing part PRT 40, column 4, line 63 through column 5, line 10), a controller (CPU 3, column 5, lines 27 through 32) for determining a state of the image data stored in the memory (column 6, lines 58 through column 7, line 2, and see Fig. 23, column 15, lines 37 through 46), an operation panel (shown in Fig. 7) for selecting any of the plurality of print modes (column 8, line 62 through column 9, line 20), and a controller (CPU3, column 5, lines 27 through 32) for comparing the state of at least two frames (column 14, lines 19 through 46, and particularly column 16, lines 17 through 55, wherein the character size of one document is compared to predetermined pixels, and then repeated for a second document, thus comparing at least two frames), as determined by the state decision controller (steps S106 in Fig. 21, Fig. 24,

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and steps S609, S613, S615 in Fig. 26), and for automatically prohibiting selecting an inoperable print mode of the plurality of print modes through the operation panel based on the result of the comparison (column 14, lines 6 through 18, and steps S616 and S617 in Fig. 26, column 19, lines 14 through 21).

Regarding *claim 27*, Yoshida discloses the image processing device discussed in claim 4 above, and further teaches of a display for displaying an operating state of the image processing device (LCD panel, column 9, lines 1 through 15), and a controller (CPU1), responsive to the selection prohibiting controller, for displaying on the display an operable mode of operation of the plurality of modes operation (column 5, lines 20 through 22, and column 8, line 62 through column 9, line 20).

Regarding *claim 28*, Yoshida discloses an image processing device operable in a plurality of modes of operation ("Nin1" operations, such as 2in1 or 4in1, etc., shown in Fig. 24), comprising a memory (multiport image memory 304 within memory 30, see Fig. 5) for storing image data of a plurality of frames (column 6, lines 47 through 51, wherein two frames or pages are stored, and column 7, lines 25 through 28), a controller (CPU 3, column 5, lines 27 through 32) for determining a state of the image data for each frame (column 6, lines 58 through column 7, line 2, and see Fig. 23, column 15, lines 37 through 46), a controller (CPU3, column 5, lines 27 through 32) for comparing the state of at least two frames (column 14, lines 19 through 46, and particularly column 16, lines 17 through 55, wherein the character size of one document is compared to predetermined pixels, and then repeated for a second document, thus comparing at

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least two frames), as determined by the state decision controller (steps S106 in Fig. 21, Fig. 24, and steps S609, S613, S615 in Fig. 26), and for automatically prohibiting selecting an inoperable mode of operation of the plurality of modes of operation through the operation panel based on the result of the comparison (column 14, lines 6 through 18, and steps S616 and S617 in Fig. 26, column 19, lines 14 through 21), and an operation panel (shown in Fig. 7), responsive to the selection prohibiting controller, for selecting any of the plurality of modes of operation, with the operation panel automatically prohibiting selecting the thus determined inoperable mode of operation (column 8, line 62 through column 9, line 20, and column 14, lines 13 through 18).

Regarding *claim 29*, Yoshida discloses the image processing device discussed in claim 28 above, and further teaches of the state of the image data determined by the state decision controller for each frame thereof is a frame size (column 10, lines 3 through 7, and Fig. 14, which shows the page length in the main scanning direction, and the length in the sub-scanning direction).

Regarding *claim 30*, Yoshida discloses the image processing device discussed in claim 29 above, and further teaches of the plurality of modes of operation include at least one of economy print mode (economized Nin1 function, column 9, lines 46 through 57), two-side print mode, and staple print mode.

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Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collard *et al*. (U.S. Patent Number 5,825,988, cited in the Office action dated 8/3/99) in view of Yoshida *et al*. (U.S. Patent Number 5,930,006).

Regarding *claim 23*, Collard discloses an image forming apparatus operable in a plurality of print modes (see Figs. 6A and 6B, digital, 2-sided, and 1-sided modes), comprising a memory (central storage means 15, or memory disc 23) for storing a plurality of print jobs (column 5, lines 9 through 61), each print job containing image data of at least two frames (column 5, lines 20 through 29), a selector for selecting one of the plurality of print jobs stored in the memory (column 7, lines 18 through 27), a controller (control module 18) for determining a state of the image data contained in the print job selected by the print-job selector (column 7, lines 28 through 37), a printer (printing unit 3) for printing the image data contained in the print job selected by the print-job selector (column 4, lines 15 through 60), and an operation panel (panel 19) for selecting any of the plurality of print modes (column 6, lines 10 through 65), and a controller (control unit 18) for selecting a print mode of the plurality of print modes through the operation panel based on

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the thus determined state of the image data contained in the print job selected by the print-job selector (column 4, line 61 through column 5, line 8, and column 7, lines 33 through 63). However, Collard fails to teach of the controller for comparing the state of at least two frames, as determined by the state decision controller, and for automatically prohibiting selecting an inoperable print mode based on the result of the comparison.

Yoshida discloses an image forming apparatus operable in a plurality of print modes ("Nin1" operations, such as 2in1 or 4in1, etc., shown in Fig. 24), comprising a memory (multiport image memory 304 within memory 30, see Fig. 5) for storing image data of at least two frames (column 6, lines 47 through 51, wherein two frames or pages are stored, and column 7, lines 25 through 28), a controller (CPU 3, column 5, lines 27 through 32) for determining a state of the image data stored in the memory (column 6, lines 58 through column 7, line 2, and see Fig. 23, column 15, lines 37 through 46), a printer for printing the image data stored in the memory for each frame and for printing (print processing part PRT 40, column 4, line 63 through column 5, line 10), an operation panel (shown in Fig. 7) for selecting any of the plurality of print modes (column 8, line 62 through column 9, line 20), and a controller (CPU3, column 5, lines 27 through 32) for comparing the state of at least two frames (column 14, lines 19 through 46, and particularly column 16, lines 17 through 55, wherein the character size of one document is compared to predetermined pixels, and then repeated for a second document, thus comparing at least two frames), as determined by the state decision controller (steps S106 in Fig. 21, Fig. 24, and steps S609, S613, S615 in Fig. 26), and for automatically prohibiting selecting an inoperable

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print mode of the plurality of print modes through the operation panel based on the result of the comparison (column 14, lines 6 through 18, and steps S616 and S617 in Fig. 26, column 19, lines 14 through 21). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include Yoshida's teachings within Collard's system. Collard's system could easily be modified to include Yoshida's teachings since both systems share cumulative features.

Allowable Subject Matter

9. Claims 14 through 16, and 24 through 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joe Pokrzywa whose telephone number is (703) 305-0146. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles, can be reached on (703) 305-4712. The fax phone number for this Group is (703) 306-5406.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3800/4700.

Joseph R. Pokrzywa

March 2, 2000

SUPERVISORY PATENT EXAMINER
GROUP 2700